

Application No. 10/633,333
Amendment filed September 30, 2004
Response to Office Action mailed August 2, 2004

Remarks/Arguments

Applicants have received and carefully reviewed the Office Action of the Examiner mailed August 2, 2004. Claims 1-15 are pending. Reconsideration and reexamination are respectfully requested.

Finality of Office Action

As a preliminary matter, Applicants note that the present Office Action has been made Final. Applicant believes that the Finality of this Office Action is improper. As noted in MPEP § 706.07(a):

Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement...

Furthermore, a second or any subsequent action on the merits in any application or patent undergoing reexamination proceedings will not be made final if it includes a rejection, on newly cited art, other than information submitted in an information disclosure statement filed under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17 (p), of any claim not amended by applicant or patent owner in spite of the fact that other claims may have been amended to require newly cited art.

(Emphasis Added). In the present case, independent claim 8 and dependent claim 10 were rejected under 35 U.S.C. §103(a) as obvious over Parker in view of Steutermann in the first Office Action, mailed March 8, 2004. These claims were not amended in Applicant's previous Amendment (filed on June 8, 2004), however, these claims have a new ground of rejection in the current final Office Action. Claims 8 and 10 are now rejected under 35 U.S.C. §102(b) over Parker alone.

Additionally, the Examiner's statements, in the Response to Arguments section on page 3 of the current Office Action are confusing in light of the rejections. The Examiner stated, "with respect to claims 13, 14 and 7, 8 and 10-12 have been fully considered and are persuasive. The rejection of these claims have been withdrawn." Claims 8, 10, 13,

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and 14, however, remain rejected, with claims 13 and 14 receiving the same rejection as in the previous Office Action.

In light of the new ground of rejection and confusing remarks, and according to MPEP § 706.07(a), the Finality of this Office Action is believed to be improper, and Applicant respectfully requests that it be withdrawn.

Claim Objection

Claim 9 was inadvertently omitted from the Listing of Claims filed with the previous amendment. The claim was not canceled and has not been amended. Applicants thank the Examiner for pointing out this error. The current listing correctly lists claim 9 as an original claim.

Allowable Subject Matter

Applicants thank the Examiner for indicating claims 7, 11, and 12 as being allowed.

Rejection under 35 U.S.C. § 102(b)

Claims 8, 10, 13 and 14 are rejected as being clearly anticipated by Parker et al. (US 4,931,948). Applicants traverse the rejection.

With respect to claims 8 and 10, the Examiner stated in the previous office action, "Parker discloses the claimed invention except for a magnet positioned on the arm of the valve shaft." See page 2, paragraph 2 of the Office Action mailed March 8, 2004. The Examiner thus admitted that Parker fails to teach an element of claims 8 and 10. In the current rejection, the Examiner did not point out where in Parker any of the elements in the claims are found. Applicants have carefully reviewed the Parker patent, and have found no teaching of a magnet coupled to the vane, as is recited in claims 8 and 10. Thus, it would appear that Parker fails to teach each and every element of the claims and thus cannot be seen to clearly anticipate claims 8 and 10.

Claims 13 and 14 are also rejected as clearly anticipated by Parker et al. Applicants have carefully reviewed the Parker et al. patent, and the only discussion of the

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interaction between the damper, sensor and controller appears to be that the "travel limit sensor 22 is a digital Hall effect device that provides an output when the damper blade 19b is at its maximum travel limit and another output when the blade is at any other position." See column 12, line 66 through column 13, line 1. In the entire disclosure of Parker et al., the only descriptions of the sensor 22 appear to be at column 11, lines 28, 41-42, and 46, and at column 12, lines 65-66. In none of these recitations is there any description of setting or resetting a home position. Thus, Parker et al. only appears to teach the sensor indicating the position of the damper blade in a "yes" or "no" manner with respect to the maximum limit: when the damper is at a maximum limit, the signal is "yes" the damper is at the maximum limit; and when the damper is in some other position, the signal is "no" the damper is not at the maximum limit. Parker et al. does not appear to disclose or contemplate setting or resetting a home position. Additionally, claims 13 and 14 recite a position indicator coupled to the vane. Parker et al. only appear to teach travel limit sensors adjacent the damper blade. See reference 22 in Fig. 2.

In the Response to Arguments on page 3 of the Office Action, the Examiner states that the detected home position of the damper vane or the resetting of home position is achieved by the travel limit sensors of Parker. Applicants respectfully disagree. Parker et al. does not teach, suggest or contemplate setting or resetting a home position for the damper. As stated above, the travel limit sensors of Parker et al. merely indicate whether or not the damper blade is at a maximum travel limit. There is no resetting involved in the methods of Parker et al. Even if one were to consider the travel limit sensor of Parker et al. as the position indicator of instant claim 13, Parker et al. discloses providing an output when the damper blade is at its maximum travel limit, or at some other position, but Parker et al. fails to disclose setting a home position based on that output. Claim 14 recites measuring when the index signal starts and ends, selecting a midpoint between the start and end of the index signal as the home position, and returning the vane to the home position. Parker et al. do not teach or suggest such method steps. The Examiner asserts that detecting and resetting the home position is achieved by the travel limit sensors of Parker et al., but does not indicate how such steps would be achieved. If this rejection is maintained, Applicants request that the Examiner point out where in Parker et al. a setting

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or resetting of home position is taught or explain how such steps would be achieved by the device and methods of Parker et al. Additionally, with respect to claim 14, the Examiner is requested to point out where in Parker et al. a teaching can be found of measuring the start and end of an index signal, and returning the vane to a home position selected as the midpoint between the start and end of the index signal. As Parker et al. do not teach each and every element of claims 8, 10, 13 and 14, withdrawal of the rejection is respectfully requested.

Rejection under 35 U.S.C. § 103

Claims 1, 3-6 and 15 are rejected as being unpatentable over Parker et al. The Examiner states that Parker et al. teaches the invention except for the damper vane to be not sensed by any sensor beyond the home position. Independent claims 1 and 15 recite the device resetting the home position when the sensor senses the damper vane has reached the home position after being away from the home position. Parker et al. does not teach or suggest this element. In the system of Parker et al., the sensor is a travel limit sensor that provides one signal when the damper blade is at its maximum travel limit and another signal when the damper blade is at a position other than the maximum travel limit. See column 12, line 66 through column 13, line 1. The device of Parker et al. only appears to detect the position of the damper blade with respect to a maximum travel limit. Parker et al. do not teach or suggest their device as sensing when the damper blade reaches a home position, moving the blade to a second position, and resetting the home position when the sensor senses the blade has reached the home position, as is recited by the instant claims.

The Examiner asserts that it would have been obvious for the damper vane to be not sensed by any sensor beyond the limit position because it has been held that omission of an element and its function in a combination where the remaining elements perform the same function as before involves only routine skill in the art. Applicants submit that the difference between the instant claims and the device of Parker et al. is not simply an omission of an element where the remaining elements perform the same function. As stated above, the claims recite a system in which a home position of the damper is sensed,

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the damper is moved away from the home position, and the home position is reset when the sensor senses the damper has again reached the home position. If the elements and functions of sensing the home position and resetting the home position are removed from the instant claims, the remaining elements do not perform the same functions. As explained in the specification at page 8, line 28 through page 9, line 6, the sensing device and position indicator provides the advantage of realigning the damper vane if it becomes misaligned while moving from a first to a second position. Thus, by sensing a home position and resetting the home position when the damper vane reaches that home position, the damper vane is constantly kept in alignment. Removing the element and function would not provide the alignment feature of the claimed invention. Thus, the instant fact pattern is distinguished from that in *In re Karlson*.

Parker et al. fail to teach or suggest the limitations in claims 1, 3-6 and 15. Additionally, the Examiner has not provided any motivation for one of ordinary skill in the art to modify the teachings of Parker et al. to achieve the instant invention. Withdrawal of the rejection is respectfully requested.

Claims 2 and 12 are rejected as being unpatentable over Parker et al. in view of Steutermann. The Examiner states that Parker et al. teaches the claimed invention except for a magnet positioned on the arm of the valve shaft. Steutermann is cited for teaching a shaft position detector and control device with a magnet positioned on the arm of the valve shaft, in column 6, lines 4-43. The Examiner asserts that it would have been obvious to provide the HVAC system of Parker et al. with a magnet positioned on the arm of the valve shaft, as taught by Steutermann in order to provide a precision valve position. Applicants respectfully traverse the rejection.

As stated above, independent claim 1 recites a damper device in which a damper vane moves from a home position in which a sensor senses the vane to a second position in which the vane is not sensed by any sensor in the device, and back to the home position, with the home position being reset when the sensor senses the vane has reached the home position. Parker et al. teach a system in which a "travel limit sensor 22... provides an output when the damper blade 19b is at its maximum travel limit and another output when the blade is at any other position." See column 12, line 66 through column

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13, line 1. Parker et al. fail to disclose, contemplate, or suggest detecting a home position of the damper vane and resetting the home position when the vane reaches the home position. Steutermann does not provide what Parker et al. lack.

Steutermann discloses a device including a plurality of sensors 71-78, such as Hall Effect sensors, that detect a magnet 70 on the shaft 30 of a valve 33. See column 6, lines 18-25. Steutermann discloses that "first one then two of the sensors 71-78" are actuated to indicate the segment of the arc of rotation in which the shaft is located. See column 8, lines 25-30. As illustrated in FIG. 5, the location of the magnet and thus a damper carrying it is always known based on the series of sensors. See FIG. 5 and column 10, lines 59-66. Thus, the magnet of Steutermann is detected by at least one sensor no matter where the shaft and damper are located. Steutermann fails to teach setting and resetting a home position, as is recited by the instant claims.

Applicant submits that there is no motivation to combine the teachings of Parker et al. and Steutermann. However, even if one were to combine the teachings of Parker et al. and Steutermann, Applicants submit that one would not achieve the instantly claimed invention. As stated above, neither Parker et al. nor Steutermann teach, contemplate or suggest determining a home position based on sensing the damper vane and resetting the home position when the damper vane reaches that home position. Thus, neither Parker et al. nor Steutermann, alone or in combination, teach all of the elements of independent claim 1 or claim 2, which is dependent thereon. Withdrawal of the rejection is respectfully requested.

Claim 12 is listed in the obviousness rejection, but is also listed as being allowed in paragraph 6 on page 3 of the Office Action. As claim 12 depends from independent claim 11, which is also indicated as being allowed, Applicants assume the inclusion of claim 12 in the obviousness rejection is an error. Withdrawal of the rejection is respectfully requested.

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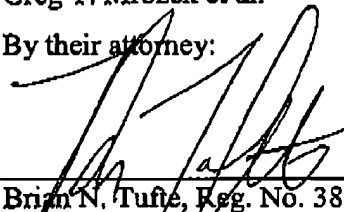
Reconsideration and reexamination are respectfully requested. It is submitted that, in light of the above remarks, all pending claims 1-15 are now in condition for allowance. If a telephone interview would be of assistance, please contact the undersigned attorney at 612-359-9348.

Respectfully Submitted,

Greg T. Mrozek et al.

By their attorney:

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